## Message

From: Bertram, Gary [Bertram.Gary@epa.gov]

**Sent**: 7/27/2016 7:01:26 PM

To: Ellis, Todd [todd.ellis@nebraska.gov]

CC: Terriquez, Joe [terriquez.joe@epa.gov]; Werner, Leslye [Werner.Leslye@epa.gov]

**Subject**: RE: Alternative timeline and HOV request

Todd – Thanks for sharing the Butler County HOV request. After reviewing the materials you provided, I do have some comments.

- You indicated in a separate e-mail that leachate may be recycled in this area of the landfill. It is my understand that landfills that recycle leachate tend to be a little warmer than landfills that do not. There is a landfill in Missouri that we are looking at that recycles leachate. The gas temperature in that landfill has been running around 140 F in some of the wells (+/- 5 degrees). In discussions with the state solid waste staff, they indicate increased gas temperature is directly related to the practice of leachate recycling.
- The data that you shared does show a fairly stable temperature. A stable 140 145 F typically isn't considered to be an indicator of a subsurface heating event. Therefore, it may be reasonable to approve their request. Before doing so, you may wish to request a little more data. The data presented is fairly short term, ~six months. I usually request at least a year's worth of information to see if the trend holds for a longer period of time. I'm not positive it's necessary in this case, but, it would make me more comfortable since they had (or are currently) experienced a subsurface heating event.
- The site has asked for a blanket 145 F HOV for the wells in question. It's a judgement call, but the data would indicate that Well 17 could benefit from the 145 F limit, while the remaining wells seem to peak around 140 F. You might ask why all of the wells need 145 F (for example, the high temperature for well 28 was 137 F. Nothing prohibits you from granting the 145 F limit for all wells in the request, and it may be reasonable to do so. I just like to understand whether the upper limit is needed due to difficulty keeping the temperature low, if the landfill operator is anticipating higher temps, or if they just want a buffer so they don't have to adjust the wells as frequently.
- Just something for the back of the mind. MNDR did something recently that I've never seen before. They placed an expiration date on an HOV approval. They had a situation where the landfill stated the landfill gas temps were elevated due to past leachate recycling and poor surface cover/vegetation (allowing rainwater to saturate the cover and underlying waste). The MDNR granted the HOV request, but added the conditions of an expiration date and requirement to improve the cover. I'm not sure that it fits for this situation (unless additional data shows temps suddenly elevated due to modified practices), but it's an interesting concept to consider for future HOV requests.
- Regarding extension of the 120 day timeline for wells 22 & 23, I think you have that under control. My suggestion would have been to require a plan of action and increased monitoring (which I think you have done). The landfill has acknowledged they are dealing with a pyrolysis event (or subsurface heating event, smoldering event, etc). Drilling a well at this time makes little sense because the introduction of oxygen to the area will just create a larger problem. The primary concern should be the efforts taken by the landfill operator to contain and/or extinguish the smoldering waste.

I hope this is helpful. Please feel free to give me a yell if I didn't address all of your questions or if you have questions regarding this response.

Take Care,

Gary Bertram U.S. EPA - Region 7 11201 Renner Blvd Lenexa, KS 66219

913-551-7533

From: Ellis, Todd [mailto:todd.ellis@nebraska.gov]

Sent: Monday, July 25, 2016 9:55 AM

To: Bertram, Gary <Bertram.Gary@epa.gov>

Subject: FW: Alternative timeline and HOV request

Here is the request

From: Kelly Danielson [mailto:KellyD@WasteConnections.com]

**Sent:** Friday, July 22, 2016 4:30 PM

To: Gidley, Bill; Ellis, Todd

**Cc:** Geoff Strack; 'Stutz, Matt'; David Payne **Subject:** Alternative timeline and HOV request

Gentlemen – Attached is the letter request for an alternate timeline and higher operation value request. We will also be providing you some tables via email next week that will help you interpret the data. The original hard copy is in the mail. Thanks
Kelly

From:

Sent: Friday, July 22, 2016 4:23 PM

To: Kelly Danielson

Subject: